

CASE NARRATIVE

September 12, 2011

Lab Name: Anatek Labs, Inc. 1282 Alturas Drive, Moscow, ID 83843 www.anateklabs.com FL NELAP E87893, NV ID13-2004-31, WA DOE C126, OR ELAP ID200001, MT 0028, ID, CO, NM

Project Name: Suislaw Pilot POCIS Study

Anatek Batch: 110830008

Project Summary: Five POCIS disk composites (3 POCIS membranes per sample) were received for analysis by EPA 8321A. All samples were received cold and wrapped in aluminum foil with the appropriate chain of custody. Client samples did exhibit some damage during shipping and in all cases at least 1 of the 3 composite POCIS sampler membranes was fractured and most of the Oasis HLB resin contained within was recovered.

<u>Client ID</u>	<u>Site Name</u>	<u>Anatek Lab ID</u>
1 S	Fish Creek near mouth	110830008-001
2	Lake Creek upstream Fish Creek	110830008-002
3	Congdon Creek ~1/4 mile from mouth	110830008-003
4	Unnamed drainage to Congdon Creek	110830008-004
5 S	Nelson Creek downstream of Almaisie Creek	110830008-005

QA/QC Checks

<u>Parameters</u>	<u>Yes / No</u>	<u>Exceptions / Deviations</u>
Sample Holding Time Valid?	NA	NA
Method Blank(s) Valid?	Y	NA
Internal Standard Responses Valid?	Y	Extracts suppressed response
Initial Calibration Curve(s) Valid?	Y	NA
Continuing Calibration(s) Valid?	Y	NA

1. Holding Time Requirements

No holding time requirements were mentioned in the method

2. Calibration Requirements

No problems encountered.

3. Oasis HLB Resin and POCIS Analyte Recovery Testing

The Oasis HLB resin (Waters #89A31124A) was tested to determine recovery efficiency for the analytes of interest in this watershed study. The Oasis HLB resin was tested using a traditional SPE cartridge extraction design and a lab water sample containing 25 ppb of each herbicide or metabolite was passed through the SPE cartridge. The analytes were eluted from the Oasis HLB sorbent using the same extraction procedure as employed for the POCIS samplers (see table for results). The Oasis HLB resin was also tested for cleanliness in regards to analyte residue and as expected no herbicides of interest were detected (< 1 ppb per 200 mg of resin).

<u>Analyte</u>	<u>LFB Recovery</u>
2,4-D	56%
Triclopyr	61%
Trichloropyridinol	77%
Atrazine	68%
DEA	65%
DIA	70%
Hexazinone	76%

The POCIS sampler was also tested to estimate recovery efficiency for the analytes of interest in this watershed study. The POCIS sampler was submerged in lab water (with stirring) that contained 55 ppb of each herbicide or metabolite and remained so for 16 hours. The analytes were eluted from this POCIS sampler using the same extraction procedure as employed for the POCIS samples submitted (see table for results).

<u>Analyte</u>	<u>Recovery</u>
2,4-D	5.1%
Triclopyr	5.4%
Trichloropyridinol	2.9%
Atrazine	5.6%
DEA	12%
DIA	8.4%
Hexazinone	15%

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504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: SIUSLAW WATERSHED GUARDIANS
Address: 33851 CEA JAC RD
COTTAGE GROVE, OR 97424
Attn: JAN WRONCY

Batch #: 110830008
Project Name: SIUSLAW PILOT POCIS STUDY

Analytical Results Report

Sample Number	110830008-001	Date/Time Received	8/30/2011 10:13 AM
Client Sample ID	1S Fish Creek Near Mouth	Sampling Date	5/15/2011
Matrix	Solid	Extraction Date	9/8/2011
Comments	Results based on POCIS composite		

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
2,4-D	ND	ng	1	9/8/2011	TGT	EPA 8321A	
Atrazine	157	ng	1	9/8/2011	TGT	EPA 8321A	
Desethyl Atrazine	47.7	ng	1	9/8/2011	TGT	EPA 8321A	
Desisopropyl Atrazine	ND	ng	2	9/8/2011	TGT	EPA 8321A	
Hexazinone	192	ng	1	9/8/2011	TGT	EPA 8321A	
Trichloropyridinol	ND	ng	2	9/8/2011	TGT	EPA 8321A	
Triclopyr	ND	ng	1	9/8/2011	TGT	EPA 8321A	

Sample Number	110830008-002	Date/Time Received	8/30/2011 10:13 AM
Client Sample ID	2 Lake Creek Upstream Fish Creek	Sampling Date	5/15/2011
Matrix	Solid	Extraction Date	9/8/2011
Comments	Results based on POCIS composite		

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
2,4-D	ND	ng	1	9/8/2011	TGT	EPA 8321A	
Atrazine	47.3	ng	1	9/8/2011	TGT	EPA 8321A	
Desethyl Atrazine	2.6	ng	1	9/8/2011	TGT	EPA 8321A	
Desisopropyl Atrazine	ND	ng	2	9/8/2011	TGT	EPA 8321A	
Hexazinone	27.9	ng	1	9/8/2011	TGT	EPA 8321A	
Trichloropyridinol	ND	ng	2	9/8/2011	TGT	EPA 8321A	
Triclopyr	ND	ng	1	9/8/2011	TGT	EPA 8321A	

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Address: 33851 CEA JAC RD
COTTAGE GROVE, OR 97424
Attn: JAN WRONCY

Batch #: 110830008
Project Name: SIUSLAW PILOT POCIS STUDY

Analytical Results Report

Sample Number	110830008-003	Date/Time Received	8/30/2011 10:13 AM
Client Sample ID	3 Congdon Creek ~1/4 mile from mouth	Sampling Date	5/21/2011
Matrix	Solid	Extraction Date	9/8/2011
Comments	Results based on POCIS composite		

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
2,4-D	ND	ng	1	9/8/2011	TGT	EPA 8321A	
Atrazine	5.73	ng	1	9/8/2011	TGT	EPA 8321A	
Desethyl Atrazine	< 1.0	ng	1	9/8/2011	TGT	EPA 8321A	
Desisopropyl Atrazine	ND	ng	2	9/8/2011	TGT	EPA 8321A	
Hexazinone	10.9	ng	1	9/8/2011	TGT	EPA 8321A	
Trichloropyridinol	ND	ng	2	9/8/2011	TGT	EPA 8321A	
Triclopyr	ND	ng	1	9/8/2011	TGT	EPA 8321A	

Sample Number	110830008-004	Date/Time Received	8/30/2011 10:13 AM
Client Sample ID	4 Unnamed Drainage to Congdon Creek	Sampling Date	5/21/2011
Matrix	Solid	Extraction Date	9/8/2011
Comments	Results based on POCIS composite		

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
2,4-D	ND	ng	1	9/8/2011	TGT	EPA 8321A	
Atrazine	ND	ng	1	9/8/2011	TGT	EPA 8321A	
Desethyl Atrazine	ND	ng	1	9/8/2011	TGT	EPA 8321A	
Desisopropyl Atrazine	ND	ng	2	9/8/2011	TGT	EPA 8321A	
Hexazinone	ND	ng	1	9/8/2011	TGT	EPA 8321A	
Trichloropyridinol	ND	ng	2	9/8/2011	TGT	EPA 8321A	
Triclopyr	ND	ng	1	9/8/2011	TGT	EPA 8321A	

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Address: 33851 CEA JAC RD
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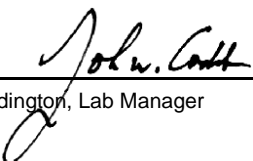
Batch #: 110830008
Project Name: SIUSLAW PILOT POCIS STUDY

Analytical Results Report

Sample Number	110830008-005	Date/Time Received	8/30/2011 10:13 AM
Client Sample ID	5S Nelson Creek downstream of Almaisie Creek	Sampling Date	7/3/2011
Matrix	Solid	Extraction Date	9/8/2011
Comments	Results based on POCIS composite		

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
2,4-D	ND	ng	1	9/8/2011	TGT	EPA 8321A	
Atrazine	ND	ng	1	9/8/2011	TGT	EPA 8321A	
Desethyl Atrazine	ND	ng	1	9/8/2011	TGT	EPA 8321A	
Desisopropyl Atrazine	ND	ng	2	9/8/2011	TGT	EPA 8321A	
Hexazinone	40.8	ng	1	9/8/2011	TGT	EPA 8321A	
Trichloropyridinol	ND	ng	2	9/8/2011	TGT	EPA 8321A	
Triclopyr	ND	ng	1	9/8/2011	TGT	EPA 8321A	

Authorized Signature


John Coddington, Lab Manager

MCL EPA's Maximum Contaminant Level
ND Not Detected
PQL Practical Quantitation Limit

This report shall not be reproduced except in full, without the written approval of the laboratory.
The results reported relate only to the samples indicated.
Soil/solid results are reported on a dry-weight basis unless otherwise noted.

Original - to Anatek Labs

110830 008 **SWGO** Last Due 8/9/2011
 1st SAMP 5/15/2011 1st RCVD 8/30/2011
 SIUSLAW PILOT POCIS STUDY

Chain of Custody Form

Sampling Organization	Project Name	Project Coordinator and Phone Number
Siustlaw Watershed Guardians	Siustlaw Pilot POCIS Study	Jan Wroncy 541-925-4130

Sample Information

Site Number	Site Name	Retrieval Date	Sample Type	Container Type
-01 15	Fish Creek near mouth	5/15/11	3 POCIS disks	Can
-02 2	Lake Creek upstream Fish Creek	5/15/11	3 POCIS disks	Can
-03 3	Cogdon Creek, n. end of Bellingham's	5/21/11	3 POCIS disks	Can
-04 4	Unnamed drainage to Cogdon Creek	5/21/11	3 POCIS disks	Can
-05 55	Nelson Creek at Parker Property	7/3/11	3 POCIS disks	Can
—	MWBs			

Chain of Custody

Relinquished By	Affiliation	Date	Time	Received By	Affiliation	Date	Time	Location
Robert J. Siustlaw Siustlaw Watershed Guardians		8/29/11	11:55 am	Johnny Judson	FedEx	8/29/11	11:57	1265 Williams St Eugene OR 97401

ANATEK LABS RECEIVING LIST

- ☒ RECEIVED INTACT
☒ LABELS & CHAINS AGREE
☐ NO HEADSPACE
☐ ICE / ICE-PACKS PRESENT

CUSTODY SEALS PRESENT: N

PRESERVATIVES: —

NUMBER OF CONTAINERS: 5 SHIPPED VIA: F

DATE & TIME: 8/30/11 10:13 INSPECTED BY: BT

TEMP: 9/6 °C

33851 Cea Jac Road
Cottage Grove, OR 97424

August 29, 2011

Todd Taruscio, Ph.D.
Anatek Labs, Inc.
1282 Alturas Drive
Moscow, ID 83843

Dear Todd:

Enclosed are five sets of three POCIS disks, each set wrapped separately in aluminum foil and labeled with the sample number: 1S, 2, 3, 4, and 5S. They are packed in the can in numerical order, with 1S being on top. They are also labeled "Siuslaw Watershed Guardians" which is the name of the unincorporated group that collected the samples. I am enclosing a paint can opener for your use in opening the can.

A chain of custody form accompanies the samples. It would be most helpful if you could scan and send me a copy of the completed form.

Per our previous arrangement, Anatek will extract the Oasis HLB sorbent from each POCIS, composite the three results from each sample, and test each of the five samples for the following compounds:

- Atrazine
- Atrazine metabolite DEA
- Atrazine metabolite DIA
- Hexazinone
- 2,4-D
- Triclopyr
- Triclopyr metabolite TCP

Please call me at 541-915-7356 if there are any questions.

Thank you for all your help with this project.

Sincerely,



Roberta J. (Bobbi) Lindberg

enclosures